

Please amend the above-identified patent application, without prejudice, as follows:
IN THE SPECIFICATION:

IN THE CLAIMS:

Amend claims 6 and 12 as follows:

6. (amended) A method for the preparation of mono- or bisacylphosphines, mono- or bisacylphosphine oxides or mono- or bisacylphosphine sulfides comprising reacting a compound of formula I according to claim 1.

12. (amended) A photocurable composition comprising

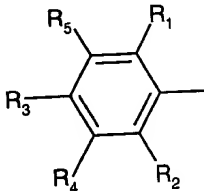
(a) at least one ethylenically unsaturated photopolymerizable compound and

(b) at least one compound of the formula II according to claim 2 or at least one compound

according to formula III
$$\text{Ar}-\overset{\text{O}}{\underset{\text{R}_6}{\text{C}}}=\overset{\text{(A)}_x}{\text{P}}-\text{Z}_1 \quad \text{(III), in which}$$

A is O or S;

x is 0 or 1;

Ar is a group ; or Ar is cyclopentyl, cyclohexyl, naphthyl, anthracyl,

biphenyl or an O-, S- or N-containing 5- or 6-membered heterocyclic ring, where the radicals cyclopentyl, cyclohexyl, naphthyl, anthracyl, biphenyl and 5- or 6-membered heterocyclic ring are unsubstituted or substituted by halogen, C₁-C₄alkyl and/or C₁-C₄alkoxy;

R₁ and R₂ independently of one another are C₁-C₂₀alkyl, OR₁₁, CF₃ or halogen;

R₃, R₄ and R₅ independently of one another are hydrogen, C₁-C₂₀alkyl, OR₁₁ or halogen;

or in each case two of the radicals R₁, R₂, R₃, R₄ and R₅ together form C₁-C₂₀alkylene which can be interrupted by O, S or -NR₁₄;

R_6 is C_1 - C_{24} alkyl, unsubstituted or substituted by C_5 - C_{24} cycloalkenyl, phenyl, CN, $C(O)R_{11}$, $C(O)OR_{11}$, $C(O)N(R_{14})_2$, $OC(O)R_{11}$, $OC(O)OR_{11}$, $N(R_{14})C(O)N(R_{14})$, $OC(O)NR_{14}$, $N(R_{14})C(O)OR_{11}$, cycloalkyl, halogen, OR_{11} , SR_{11} , $N(R_{12})(R_{13})$ or $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-\text{CH}_2$;

C_2 - C_{24} alkyl which is interrupted once or more than once by nonconsecutive O, S or NR_{14} and which is unsubstituted or substituted by phenyl, OR_{11} , SR_{11} , $N(R_{12})(R_{13})$, CN, $C(O)R_{11}$, $C(O)OR_{11}$,

$C(O)N(R_{14})_2$ and/or $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-\text{CH}_2$;

C_2 - C_{24} alkenyl which is uninterrupted or interrupted once or more than once by nonconsecutive O, S or NR_{14} and which is unsubstituted or substituted by OR_{11} , SR_{11} or $N(R_{12})(R_{13})$;

C_5 - C_{24} cycloalkenyl which is uninterrupted or interrupted once or more than once by nonconsecutive O, S or NR_{14} and which is unsubstituted or substituted by OR_{11} , SR_{11} or $N(R_{12})(R_{13})$;

C_7 - C_{24} arylalkyl which is unsubstituted or substituted on the aryl group by C_1 - C_{12} alkyl, C_1 - C_{12} alkoxy or halogen;

C_4 - C_{24} cycloalkyl which is uninterrupted or interrupted once or more than once by O, S and/or NR_{14} and which is unsubstituted or substituted by OR_{11} , SR_{11} or $N(R_{12})(R_{13})$; or C_8 - C_{24} arylalkyl or C_8 - C_{24} arylalkenyl;

R_{11} is H, C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, C_3 - C_8 cycloalkyl, phenyl, benzyl or C_2 - C_{20} alkyl which is interrupted once or more than once by nonconsecutive O atoms and which is unsubstituted or substituted by OH and/or SH;

R_{12} and R_{13} independently of one another are hydrogen, C_1 - C_{20} alkyl, C_3 - C_8 cycloalkyl, phenyl, benzyl or C_2 - C_{20} alkyl, which is interrupted once or more than once by O or S and which is unsubstituted or substituted by OH and/or SH; or R_{12} and R_{13} together are C_3 - C_5 alkylene which is uninterrupted or interrupted by O, S or NR_{14} ;

Z_1 is C_1 - C_{24} alkyl, which is unsubstituted or substituted once or more than once by OR_{15} , SR_{15} ,

$N(R_{16})(R_{17})$, phenyl, halogen, CN, $-N=C=A$, $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-\text{CH}_2$, $-\overset{\text{A}}{\underset{\text{H}}{\text{C}}}-R_{18}$, $-\overset{\text{A}}{\underset{\text{H}}{\text{C}}}-OR_{18}$

and/or $-\overset{\text{A}_1}{\underset{\text{H}}{\text{C}}}-N(R_{18})_2$ or Z_1 is C_2 - C_{24} alkyl which is interrupted once or more than once by O, S

or NR_{14} and which can be substituted by OR_{15} , SR_{15} , $N(R_{16})(R_{17})$, phenyl, halogen, $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-\text{CH}_2$,

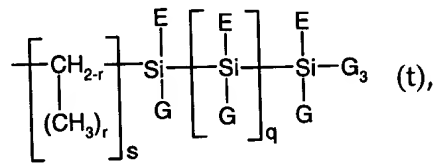
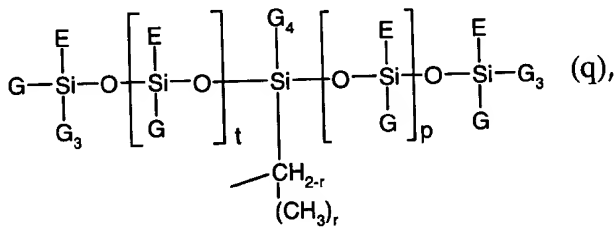
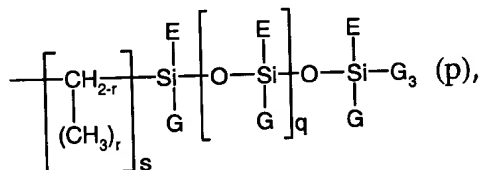
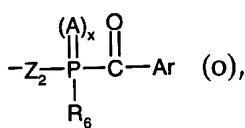
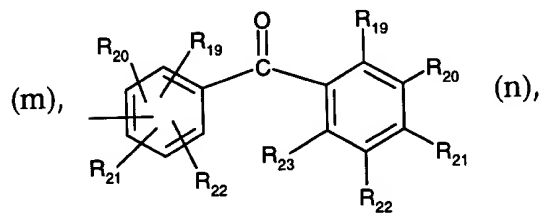
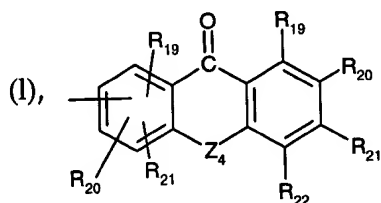
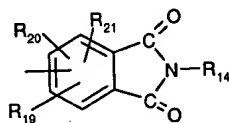
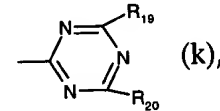
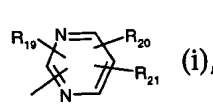
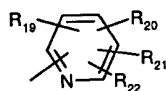
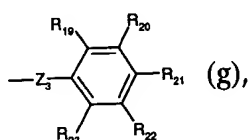
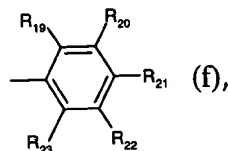
$\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{R}_{18}$, $\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{OR}_{18}$ and/or $\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{N}(\text{R}_{18})_2$; or Z_1 is $\text{C}_1\text{--C}_{24}$ alkoxy, which is substituted once

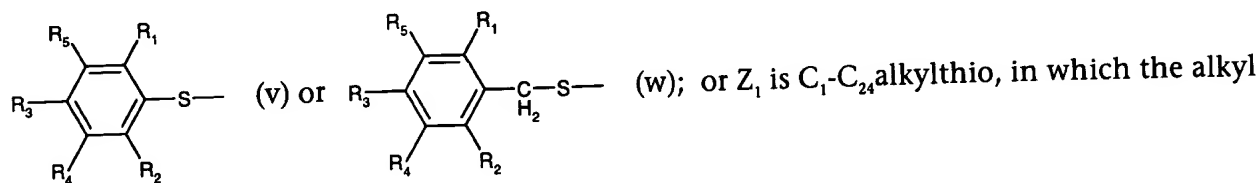
or more than once by phenyl, CN, $\text{---}\text{N}=\text{C}=\text{A}$, $\text{---}\overset{\overset{\text{O}}{\parallel}}{\text{C}}\text{---}\text{CH}_2$, $\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{R}_{18}$, $\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{OR}_{18}$ and/or

$\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{N}(\text{R}_{18})_2$; or Z_1 is $\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{OR}_{11}$, $\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{N}(\text{R}_{16})(\text{R}_{17})$, $\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{OR}_{11a}$ or $\text{---}\overset{\overset{\text{A}}{\parallel}}{\text{C}}\text{---}\text{N}(\text{R}_{18a})(\text{R}_{18b})$; or

Z_1 is unsubstituted $\text{C}_3\text{--C}_{24}$ cycloalkyl or $\text{C}_3\text{--C}_{24}$ cycloalkyl substituted by $\text{C}_1\text{--C}_{20}$ alkyl, OR_{11} , CF_3 or halogen; unsubstituted $\text{C}_2\text{--C}_{24}$ alkenyl or $\text{C}_2\text{--C}_{24}$ alkenyl substituted by $\text{C}_6\text{--C}_{12}$ aryl, CN, $(\text{CO})\text{OR}_{15}$ or

$(\text{CO})\text{N}(\text{R}_{18})_2$; or Z_1 is $\text{C}_3\text{--C}_{24}$ cycloalkenyl or is one of the radicals

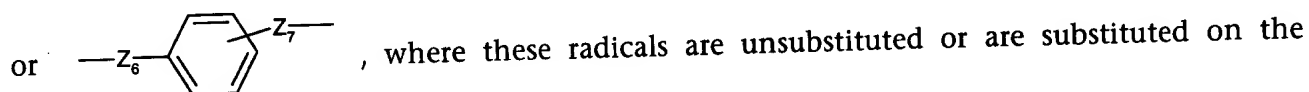
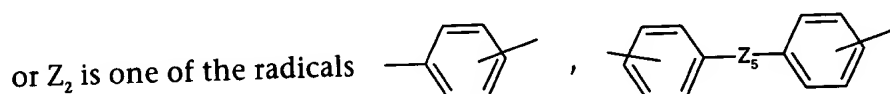




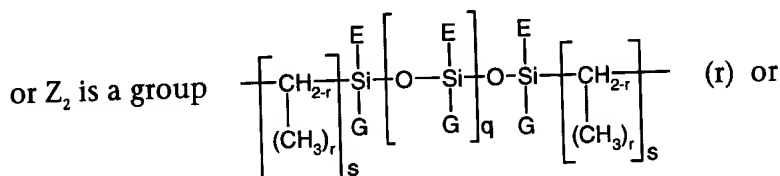
radical is uninterrupted or interrupted once or more than once by nonconsecutive O or S, and is unsubstituted or substituted by OR_{15} , SR_{15} and/or halogen; with the proviso that Z_1 and R_6 are not identical;

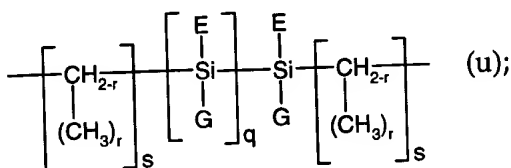
A_1 is O, S or NR_{18a} ;

Z_2 is C_1-C_{24} alkylene; C_2-C_{24} alkylene interrupted once or more than once by O, S or NR_{14} ; C_2-C_{24} alkenylene; C_2-C_{24} alkenylene interrupted once or more than once by O, S or NR_{14} ; C_3-C_{24} cycloalkylene; C_3-C_{24} cycloalkylene interrupted once or more than once by O, S or NR_{14} ; C_3-C_{24} cycloalkenylene; C_3-C_{24} cycloalkenylene interrupted once or more than once by O, S or NR_{14} ; where the radicals C_1-C_{24} alkylene, C_2-C_{24} alkylene, C_2-C_{24} alkenylene, C_3-C_{24} cycloalkylene and C_3-C_{24} cycloalkenylene are unsubstituted or are substituted by OR_{11} , SR_{11} , $N(R_{12})(R_{13})$ and/or halogen;



aromatic by C_1-C_{20} alkyl; C_2-C_{20} alkyl which is interrupted once or more than once by nonconsecutive O atoms and which is unsubstituted or substituted by OH and/or SH; OR_{11} , SR_{11} , $N(R_{12})(R_{13})$, phenyl, halogen, NO_2 , CN, $(CO)-OR_{11}$, $(CO)-R_{11}$, $(CO)-N(R_{12})(R_{13})$, SO_2R_{24} , OSO_2R_{24} , CF_3 and/or CCl_3 ;





Z_3 is CH_2 , $\text{CH}(\text{OH})$, $\text{CH}(\text{CH}_3)$ or $\text{C}(\text{CH}_3)_2$;

Z_4 is S, O, CH_2 , $\text{C}=\text{O}$, NR_{14} or a direct bond;

Z_5 is S, O, CH_2 , CHCH_3 , $\text{C}(\text{CH}_3)_2$, $\text{C}(\text{CF}_3)_2$, SO , SO_2 , CO ;

Z_6 and Z_7 independently of one another are CH_2 , CHCH_3 or $\text{C}(\text{CH}_3)_2$;

r is 0, 1 or 2;

s is a number from 1 to 12;

q is a number from 0 to 50;

t and p are each a number from 0 to 20;

E , G , G_3 and G_4 independently of one another are unsubstituted C_1 - C_{12} alkyl or C_1 - C_{12} alkyl substituted by halogen, or are unsubstituted phenyl or phenyl substituted by one or more C_1 - C_4 alkyl; or are C_2 - C_{12} alkenyl;

R_{11a} is C_1 - C_{20} alkyl substituted once or more than once by OR_{15} or $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-\text{CH}_2$; or is C_2 - C_{20} alkyl

which is interrupted once or more than once by nonconsecutive O atoms and is unsubstituted

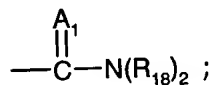
or substituted once or more than once by OR_{15} , halogen or $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-\text{CH}_2$; or R_{11a} is C_2 - C_{20} alkenyl, C_3 -

C_{12} alkynyl; or R_{11a} is C_3 - C_{12} cycloalkenyl which is substituted once or more than once by halogen,

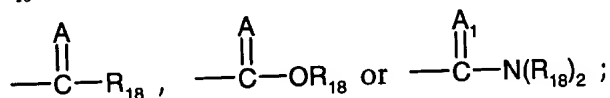
NO_2 , C_1 - C_6 alkyl, OR_{11} or $\text{C}(\text{O})\text{OR}_{18}$; or C_7 - C_{16} arylalkyl or C_8 - C_{16} arylalkyl;

R_{14} is hydrogen, phenyl, C_1 - C_{12} alkoxy, C_1 - C_{12} alkyl or C_2 - C_{12} alkyl which is interrupted once or more than once by O or S and which is unsubstituted or substituted by OH and/or SH;

R_{15} has one of the meanings given for R_{11} or is a radical $-\overset{\text{A}}{\underset{\text{H}}{\text{C}}}-\text{R}_{18}$, $-\overset{\text{A}}{\underset{\text{H}}{\text{C}}}-\text{OR}_{18}$ or



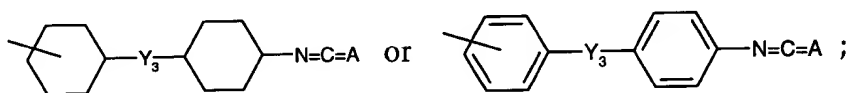
R_{16} and R_{17} independently of one another have one of the meanings given for R_{12} or are a radical



R_{18} is hydrogen, C_1 - C_{24} alkyl, C_2 - C_{12} alkenyl, C_3 - C_8 cycloalkyl, phenyl, benzyl; C_2 - C_{20} alkyl which is interrupted once or more than once by O or S and which is unsubstituted or substituted by OH; R_{18a} and R_{18b} independently of one another are hydrogen; C_1 - C_{20} alkyl, which is substituted once or more than once by OR_{15} , halogen, styryl, methylstyryl, $-N=C=A$ or $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-CH_2$; or C_2 - C_{20} alkyl, which is interrupted once or more than once by nonconsecutive O atoms and which is unsubstituted or substituted once or more than once by OR_{15} , halogen, styryl, methylstyryl or

$-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-CH_2$; or R_{18a} and R_{18b} are C_2 - C_{12} alkenyl; C_5 - C_{12} cycloalkyl, which is substituted by $-N=C=A$ or

$CH_2-N=C=A$ and is additionally unsubstituted or substituted by one or more C_1 - C_4 alkyl; or R_{18a} and R_{18b} are C_6 - C_{12} aryl, unsubstituted or substituted once or more than once by halogen, NO_2 , C_1 - C_6 alkyl, C_2 - C_4 alkenyl, OR_{11} , $-N=C=A$, $-CH_2-N=C=A$ or $C(O)OR_{18}$; or R_{18a} and R_{18b} are C_7 - C_{16} arylalkyl; or R_{18a} and R_{18b} together are C_8 - C_{16} arylcycloalkyl; or R_{18a} and R_{18b} independently of one another are



Y_3 is O, S, SO, SO_2 , CH_2 , $C(CH_3)_2$, $CHCH_3$, $C(CF_3)_2$, (CO), or a direct bond;

R_{19} , R_{20} , R_{21} , R_{22} and R_{23} independently of one another are hydrogen, C_1 - C_{20} alkyl; C_2 - C_{20} alkyl, which is interrupted once or more than once by nonconsecutive O atoms and which is unsubstituted or substituted by OH and/or SH; or R_{19} , R_{20} , R_{21} , R_{22} and R_{23} are OR_{11} , SR_{11} , $N(R_{12})(R_{13})$, NO_2 , CN, SO_2R_{24} , OSO_2R_{24} , CF_3 , CCl_3 , halogen; or phenyl which is unsubstituted or substituted once or more than once by C_1 - C_4 alkyl or C_1 - C_4 alkoxy;

or in each case two of the radicals R_{19} , R_{20} , R_{21} , R_{22} and R_{23} together form C_1 - C_{20} alkylene which is uninterrupted or interrupted by O, S or $-NR_{14}$;

R_{24} is C_1 - C_{12} alkyl, halogen-substituted C_1 - C_{12} alkyl, phenyl, or phenyl substituted by OR_{11} and/or SR_{11} ;

with the proviso that R_6 and Z_1 are not identical,

as photoinitiator.